RG104 E-1 Box 126 Feb-June 1882

# The Mint of the United States,

AT

PHILADELPHIA, PENN.,

*Assay Department,* March 16, 1882

Sir:

The following facts, taken in connection with the Melter & Refiner's account of the methods of mixing and sampling, seem to me sufficient for disposing ~~finally~~ the claims and suggestions of Messrs Howard & Möhle.

Our assays are sampled from ten-barrel lots, each lot having from three to five assays; if these do not reasonably agree with one another, the whole lot is condemned for re-mixture and re-sampling.

I give the results from ~~eight~~ ten lots representing 100 barrels, the assays in detail, the average and our report, in which fractions are always thrown in the favor of the buyer, as will appear:

| Lot Barrels | Assays — Milligrams of Gold. | Average | Reported |
|---|---|---|---|
| 1 to 10 | 22, 20, 22 | $21\frac{1}{3}$ | 21 |
| 11 – 20 | 10, 8, 8. | $8\frac{2}{3}$ | 8 |

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# The Mint of the United States,

AT

PHILADELPHIA, PENN.,

*Assay Department,* ....., 188 .

| Lot — Barrels | Assays — | Average — | Reported. |
|---|---|---|---|
| 21-30 | 22, 27, 26 | 25 | 24 |
| 31-40 | 32, 32, 32, | 32 | 32 |
| 41-50 | 35, 31, 34. | $33\frac{1}{3}$ | 33 |
| 51-60 | 17, 14, 16 | $15\frac{2}{3}$ | 15 |
| 61-70 | 17, 20, 20, | 19 | 19 |
| 71-80 | 16, 15, 16, | $15\frac{2}{3}$ | 16 |
| 81-90 | 23, 24, 24 | $23\frac{2}{3}$ | 23 |
| 91-100 | 37, 41, 38, | $38\frac{2}{3}$ | 38 |

These figures, of course, refer only to the gold fineness.

Certainly no fault can be found either with the sampling, the agreement of finenesses, or the reports thereon. I would remark, however, that if these assays were made with proof-corrections as rigidly as in the case of bullion, the figures would run somewhat higher. We do not do this because we know that the buyer is liable to some loss in working on a large scale, and so far as we know, other purchasers are quite satisfied that

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# The Mint of the United States,

AT

PHILADELPHIA, PENN.,

*Assay Department,* ....., *188* .

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we do not report as fully upon sweeps as we do upon bullion.

Very Respectfully

Jacob B. Eckfeldt

Assayer

Hon. A. Loudon Snowden

Superintendent

NARA RG104, Entry 1, Box 126

The Mint of the United States,
At Philadelphia, Penn.,
Assay Department,
March 16, 1882

Sir:

The following facts, taken in connection with the Melter & Refiner's account of the methods of mixing and sampling, seem to me sufficient for disposing the claims and suggestions of Messrs. Howard and Möhle.

Our assays are sampled from ten-barrel lots, each lot having from three to five assays; of those do not reasonably agree with one another, the whole lot is condemned for re-mixture and re-sampling.

I give the results from ten lots representing 100 barrels, the assays in detail, the average and our report, in which fractions are always thrown in the favor of the buyer, as will appear:

| Lot | Assays | Average | Reported |
|---|---|---|---|
| Barrels | Milligrams of Gold | | |
| 1 to 10 | 22, 20, 22 | 21 1/3 | 21 |
| 11-20 | 10, 8, 8 | 8 2/3 | 8 |

| Lot | Assays | Average | Reported |
|---|---|---|---|
| Barrels | | | |
| 21-30 | 22, 27, 25 | 25 | 24 |
| 31-40 | 32, 32, 32 | 32 | 32 |
| 41-50 | 35, 31, 34 | 33 1/3 | 33 |
| 51-60 | 17, 14, 16 | 15 2/3 | 15 |
| 61-70 | 17, 20, 20 | 19 | 19 |
| 71-80 | 16, 15, 16 | 15 2/3 | 15 |
| 81-90 | 23, 24, 24 | 23 2/3 | 23 |
| 96-100 | 37, 41, 38 | 38 2/3 | 38 |

These figures, of course, refer only to the gold finenesses.

Certainly no fault can be found either with the sampling, the agreement of finenesses, or the reports thereon. I would remark, however, that if these assays were made with proof-corrections as rigidly as in the case of bullion, the figures would run somewhat higher. We do not do this because we know that the buyer is liable to some loss in working on a large scale, and so far as we know, other purchases are quite satisfied that we do not report as fully upon sweeps as we do upon bullion.

Very Respectfully,
Jacob B. Eckfeldt
Assayer

Hon. A. Loudon Snowden
Supt. &c &c